

IN THE CLAIMS:

Please amend claims 1-8, 11-16, and 18 herein. Please cancel claims 9, 10, and 17 without prejudice or disclaimer. Please add new claims 54-66. Please note that all claims currently pending and under consideration in the above-referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended) A precursor composition of a reactive composition, comprising:
~~a metal material defining a continuous phase and having an energetic material comprising at least one oxidizer, at least one class 1.1 explosive, or mixtures thereof having at least one oxidizer dispersed therein therein, the metal material defining a continuous phase at a processing temperature of a reactive composition.~~
2. (Currently amended) The reactive composition precursor composition of claim 1, wherein the metal material comprises a fusible metal alloy having a melting point ranging from approximately 46°C to approximately 250°C.
3. (Currently amended) The reactive composition precursor composition of claim 2, wherein the metal material comprises a fusible metal alloy comprises comprising at least one metal selected from the group consisting of bismuth, lead, tin, cadmium, indium, mercury, antimony, copper, gold, silver, and zinc.
4. (Currently amended) The reactive composition precursor composition of claim 1, wherein the metal material comprises a fusible metal alloy having a melting point ranging from approximately 75°C to approximately 105°C.
5. (Currently amended) The reactive precursor composition of claim 1, wherein the

metal material has a density greater than approximately 7 g/cm³.

6. (Currently amended) The reactive precursor composition of claim 1, wherein the metal material comprises a fusible metal alloy having 50% bismuth, 25% lead, 12.5% tin, and 12.5% cadmium.

7. (Withdrawn-currently amended) The reactive precursor composition of claim 1, wherein the metal material comprises a fusible metal alloy having 57% bismuth, 26% indium, and 17% tin.

8. (Currently amended) The reactive precursor composition of claim 1, wherein the at least one oxidizer iscomprises an oxidizer selected from the group consisting of ammonium perchlorate, potassium perchlorate, sodium nitrate, potassium nitrate, ammonium nitrate, lithium nitrate, rubidium nitrate, cesium nitrate, lithium perchlorate, sodium perchlorate, rubidium perchlorate, cesium perchlorate, magnesium perchlorate, calcium perchlorate, strontium perchlorate, barium perchlorate, barium peroxide, strontium peroxide, copper oxide, sulfur, and mixtures thereof.

9-10. (Canceled)

11. (Currently amended) The reactive precursor composition of claim 1, further comprising a polymer/plasticizer system.

12. (Currently amended) The reactive precursor composition of claim 11, wherein the reactive precursor composition comprises a substantially homogenous mixture of the metal material and the energetic material at least one oxidizer.

13. (Currently amended) The reactive precursor composition of claim 11, wherein the polymer/plasticizer system comprises at least one polymer selected from the group consisting of polyglycidyl nitrate, nitratomethylmethyloxetane, polyglycidyl azide, diethyleneglycol

triethyleneglycol nitraminodiacetic acid terpolymer, poly(bis(azidomethyl)oxetane), poly(azidomethylmethyl -oxetane), poly(nitraminomethyl methyloxetane), poly(bis(difluoroaminomethyl)oxetane), poly(difluoroaminomethylmethyloxetane), copolymers thereof, cellulose acetate butyrate, nitrocellulose, nylon, polyester, fluoropolymers, energetic oxetanes, waxes, and mixtures thereof.

14. (Currently amended) The reactive precursor composition of claim 11, wherein the polymer/plasticizer system comprises at least one plasticizer selected from the group consisting of bis(2,2-dinitropropyl) acetal/bis(2,2-dinitropropyl)formal, dioctyl sebacate, dimethylphthalate, dioctyladipate, glycidyl azide polymer, diethyleneglycol dinitrate, butanetrioltrinitrate, butyl-2-nitrotoethyl-nitramine, trimethylolethanetrinitrate, triethylene glycoldinitrate, nitroglycerine, isodecylperlargonate, dioctylphthalate, dioctylmaleate, dibutylphthalate, di-n-propyl adipate, diethylphthalate, dipropylphthalate, citroflex, diethyl suberate, diethyl sebacate, diethyl pimelate, and mixtures thereof.

15. (Currently amended) The reactive precursor composition of claim 1, wherein the reactive precursor composition has a density greater than approximately 2 g/cm³.

16. (Currently amended) The reactive precursor composition of claim 1, further comprising a second metal material selected from the group consisting of aluminum, nickel, magnesium, silicon, boron, beryllium, zirconium, hafnium, zinc, tungsten, molybdenum, copper, titanium, sulfur, aluminum hydride, magnesium hydride, a borane compound, and mixtures thereof.

17. (Canceled)

18. (Withdrawn-currently amended) The reactive precursor composition of claim 1, wherein the reactive precursor composition comprises a heterogeneous, granulated mixture of the metal material and the energetic material.

19-53. (Canceled)

54. (New) A precursor composition of a reactive composition, comprising:
a metal material having at least one class 1.1 explosive selected from the group consisting of
cyclo-1,3,5-trimethylene-2,4,6-trinitramine, hexanitrohexaazaisowurtzitane,
4,10-dinitro-2,6,8,12-tetraoxa -4,10-diazatetracyclo-[5.5.0.0^{5,9}.0^{3,11}]-dodecane,
1,3,3-trinitroazetidine, ammonium dinitramide, dinitrotoluene, and mixtures thereof
dispersed therein, the metal material defining a continuous phase at a processing
temperature of a reactive composition.

55. (New) The precursor composition of claim 54, wherein the metal material
comprises a fusible metal alloy having a melting point ranging from approximately 46°C to
approximately 250°C.

56. (New) The precursor composition of claim 54, wherein the metal material
comprises at least one metal selected from the group consisting of bismuth, lead, tin, cadmium,
indium, mercury, antimony, copper, gold, silver, and zinc.

57. (New) The precursor composition of claim 54, wherein the metal material
comprises a fusible metal alloy having a melting point ranging from approximately 75°C to
approximately 105°C.

58. (New) The precursor composition of claim 54, wherein the metal material has a
density greater than approximately 7 g/cm³.

59. (New) The precursor composition of claim 54, wherein the metal material
comprises a fusible metal alloy having 50% bismuth, 25% lead, 12.5% tin, and 12.5% cadmium.

60. (New) The precursor composition of claim 54, wherein the metal material
comprises a fusible metal alloy having 57% bismuth, 26% indium, and 17% tin.

61. (New) The precursor composition of claim 54, further comprising a polymer/plasticizer system.

62. (New) The precursor composition of claim 61, wherein the polymer/plasticizer system comprises at least one polymer selected from the group consisting of polyglycidyl nitrate, nitratomethylmethyloxetane, polyglycidyl azide, diethyleneglycol triethyleneglycol nitraminodiacetic acid terpolymer, poly(bis(azidomethyl)oxetane), poly(azidomethylmethyl-oxetane), poly(nitraminomethyl methyloxetane), poly(bis(difluoroaminomethyl)oxetane), poly(difluoroaminomethylmethyloxetane), copolymers thereof, cellulose acetate butyrate, nitrocellulose, nylon, polyester, fluoropolymers, energetic oxetanes, waxes, and mixtures thereof.

63. (New) The precursor composition of claim 61, wherein the polymer/plasticizer system comprises at least one plasticizer selected from the group consisting of bis(2,2-dinitropropyl) acetal/bis(2,2-dinitropropyl)formal, dioctyl sebacate, dimethylphthalate, dioctyladipate, glycidyl azide polymer, diethyleneglycol dinitrate, butanetrioltrinitrate, butyl-2-nitrotoethyl-nitramine, trimethylolethanetrinitrate, triethylene glycoldinitrate, nitroglycerine, isodecylperlargonate, dioctylphthalate, dioctylmaleate, dibutylphthalate, di-n-propyl adipate, diethylphthalate, dipropylphthalate, citroflex, diethyl suberate, diethyl sebacate, diethyl pimelate, and mixtures thereof.

64. (New) The precursor composition of claim 54, further comprising a second metal material selected from the group consisting of aluminum, nickel, magnesium, silicon, boron, beryllium, zirconium, hafnium, zinc, tungsten, molybdenum, copper, titanium, sulfur, aluminum hydride, magnesium hydride, a borane compound, and mixtures thereof.

65. (New) The precursor composition of claim 54, further comprising at least one oxidizer selected from the group consisting of ammonium perchlorate, potassium perchlorate, sodium nitrate, potassium nitrate, ammonium nitrate, lithium nitrate, rubidium nitrate, cesium nitrate, lithium perchlorate, sodium perchlorate, rubidium perchlorate, cesium perchlorate,

magnesium perchlorate, calcium perchlorate, strontium perchlorate, barium perchlorate, barium peroxide, strontium peroxide, copper oxide, sulfur, and mixtures thereof.

66. (New) The precursor composition of claim 1, further comprising at least one class 1.1 explosive selected from the group consisting of trinitrotoluene, cyclo-1,3,5-trimethylene-2,4,6-trinitramine, cyclotetramethylene tetranitramine, hexanitrohexaazaisowurtzitane, 4,10-dinitro-2,6,8,12-tetraoxa-4,10-diazatetracyclo-[5.5.0.0^{5,9}.0^{3,11}]-dodecane, 1,3,3-trinitroazetidine, ammonium dinitramide, 2,4,6-trinitro-1,3,5-benzenetriamine, dinitrotoluene, and mixtures thereof.